

REMARKS

Claims 1-41 are pending in this application. Favorable reconsideration of the application in light of the following comments is respectfully solicited.

I. Rejection Under 35 U.S.C. § 102

In section 3 of the Office Action, claims 34-41 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent App. Pub. No. 2002/0161925 (Munger). Applicants respectfully traverse.

In order to anticipate a claim under Section 102, a single reference must disclose, either expressly or inherently, each and every limitation of the claim. As Munger fails to disclose a number of claimed limitations, it fails to anticipate the claimed subject matter.

A. Claims 34 and 35

First, independent claims 34 and 35 each recite, *inter alia*,

a device at or near a point of origin of a particular flow of packets through a packet data communication network . . .
receiving data packets containing marks comprising fragments of a network address of the device . . .

As discussed in the application, a device [trusted by the receiver] marks packets originating from untrusted source terminals with fragments of the marking device's address, such that the marked packets can be used by the receiver/destination terminal to determine the address of the device to focus mitigation efforts for possible denial of service attacks from the source, as an example.

Although the Office Action does not clearly identify what in Munger the Examiner believes discloses the recited "origin" or the recited "device at or near a point of origin of a particular flow of packets," based upon the various bases of rejection set forth in the Office Action against the claims, it appears the Examiner correlates originating terminal 100 with the

recited “device” for which “fragments of a network address of the device” are included in marks included in the received packets.

However, originating terminal 100 does not disclose “a device at or near a point of origin of a particular flow of packets,” as recited in claims 34 and 35. Instead, as its name suggests, originating device 100 is the origin of the described flow of TARP packets, where originating terminal 100 adds TARP headers IP_T to the TARP packets it creates. The recited “device,” for which fragments of the device’s addresses are included in the recited marks, is separate from the recited “origin of a particular flow of packets.” Thus, Munger’s originating terminal 100 cannot serve as the recited “device,” and Munger does not disclose the recited “device at or near a point of origin of a particular flow of packets.”

Second, independent claims 34 and 35 each recite, *inter alia*, that

for each respective fragment from a newly received packet, comparing predetermined bits of the respective fragment to predetermined bits of one or more fragments from previously received packets to determine if there is a match.

Page 3, lines 10-13 of the Office Action asserts these limitations are disclosed by Munger, paragraph [0124], lines 1-4. In the embodiment described in Munger, paragraph [0124], each TARP node has a plurality of assigned IP addresses it can use to communicate (paragraph [0121]). As explained in paragraph [0122], an algorithm is used to select a pair of IP addresses, one for the sender and one for the receiver. As the algorithm is agreed upon between the sender and receiver, “the [receiving] router can generate a series of 6 send/receive IP address pairs (or ‘hop window’) to compare with the next received packet” (paragraph [0123]). As explained in paragraph [0124], the receiving router “compares the send and receive IP addresses of the packet with the next N predicted send and receive IP address pairs and rejects the packet if it is not a member of this set.”

This does not disclose or suggest the above comparing step. First, the relied upon portion of Munger does not relate to TARP header IP_T , apparently cited by page 3, lines 3-7 of the Office Action as relating to the recited “fragments.” Instead, the IP address pairs described in Munger, paragraph [0124] are employed in final unencrypted IP header IP_C . Second, Munger does not disclose the recited “comparing . . . to predetermined bits of one or more fragments from previously received packets.” Instead, paragraph [0124] discloses that it “compares . . . with . . . predicted . . . address pairs.” With respect to previously received packets, paragraph [0123] indicates “that a second packet with the same IP address pair will be discarded.” Thus, Munger does not disclose or suggest the recited comparing step.

Third, independent claims 34 and 35 each recite, *inter alia*, that

for each match between a respective fragment from a newly received packet and a fragment from a previously received packet, concatenating one of the matching fragments with non-matched bits of the other one of the matching fragments,

wherein the matching and concatenation is performed one or more times until a combination of fragments produces a complete address of a device that marked a plurality of the received packets.

Page 3, lines 18-20 of the Office Action asserts the above limitations are disclosed by Munger, paragraph [0013], lines 4-6, which states “[t]he session key is used to decrypt the payloads of the TARP packets permitting the data stream to be reconstructed.” This does not disclose the recited limitations. For the embodiment shown in FIG. 3B, once TARP packets 340 are obtained by destination terminal 110 possessing the session key, payloads of the packets, without TARP headers IP_T , are deinterleaved, block-decrypted, and then “ IP_T headers are converted into normal IP_C headers” (paragraph [0115]). This does not disclose or suggest “concatenating one of the matching fragments with non-matched bits of the other one of the matching fragments,” at least because there is no disclosure of concatenating address fragments

or discussion relating to non-matched bits of address fragments. Also, this does not disclose or suggest that “matching and concatenation is performed . . . until a combination of fragments produces a complete address,” as there is no disclosure of combining fragments to produce a complete address. Although it might be argued that destination terminal 110 concatenates payload portions of packets, this does not relate to concatenating fragments of a network address, as recited in the claims. Munger does not disclose or suggest concatenation of address fragments occurring even once, or “one or more times until a combination of fragments produces a complete address,” as recited in claims 34 and 35. Thus, Munger does not disclose or suggest the recited concatenating step, or the other limitations recited above.

Additionally, Applicants respectfully note that the claimed subject matter relates to self assembling overlapping address fragments, in which bits of a received address fragment may be matched with bits in a previously received packet to reconstruct a complete address. As such, the recited steps do not require use of a session key as cited in page 3, lines 18-20 of the Office Action.

For at least the above reasons, Munger fails to disclose the limitations recited in claims 34 and 35. Thus, Munger does not anticipate claims 34 and 35. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 34 and 35.

B. Claims 36-41

Independent claim 36 recites,

A method of marking communication packets forwarded by a router through a packet data communication network with router identifying information, comprising:

forming one or more first fragments from a first network address associated with the router;

forming one or more second fragments from a second network address associated with the router; and

marking a plurality of packets by adding the fragments to the plurality of packets; and
forwarding the plurality of marked packets from the router through the packet data communication network.

Accordingly, prior to forwarding the plurality of marked packets, the packets are marked by adding fragments from a network address associated with the router.

Page 5, lines 6-15 of the Office Action asserts claim 36 is disclosed by Munger, FIG. 16 and paragraphs 42 and 65. This is incorrect. First, the cited portions relate to activities performed in processing a received TARP packet, and do not relate to the recited forming and marking steps performed prior to “forwarding the plurality of marked packets from the router.”

Second, claim 36 recites that the first and second fragments are each from an address “associated with [a] router.” However, it is noted that neither originating terminal 100, which other bases of rejection in the Office Action appear to identify as a marking router, nor destination terminal 110, to which the features of Munger cited at page 5, lines 6-15 of the Office Action relate, are a “router.” By definition, a router is a device that forwards or relays network packets between computer networks. As TARP network endpoints, originating terminal 100 and destination terminal 110 do not function as routers in Munger.

Third, FIG. 16 does not relate to the recited marking of a plurality of packets by adding fragments from a network address associated with the router prior to forwarding the plurality of marked packets from the router. Instead, as discussed in Munger, paragraphs [0121]-[0124], “each pair of communicating nodes can use a plurality of source IP addresses and destination IP addresses for communicating with each other” (paragraph [0121]). An “algorithm governs the sequential selection of IP-address pairs” (paragraph [0122]). At the receiving node, “[r]eceived packets that do not have the predicted source/destination IP addresses . . . are rejected” (paragraph [0124]). FIG. 16 relates to a fast packet filter implemented by a receiving node to

quickly filter out packets with incorrect IP address pairs, the filter using a bit vector called a “presence vector,” as described in Munger, paragraphs [0201]-[0214]. In a case where nodes use “‘A’ blocks [that] have a 24 bits of address that can be hopped” (paragraph [0203]), there are “48 bits of hopping addresses as an index” into the presence vector (paragraph [0211]). As a bit vector with 2^{48} bits is unreasonably large, “one could subdivide the 48 bits into four 12-bit fields . . . at the expense of occasionally having to process a hostile packet” (paragraph [0211]).

However, this subdivision of bits to indices into a set of bit vectors does not relate to the recited marking of packets to be forwarded by a router. For example, even if, for the sake of argument, Munger’s segmenting were read upon the recited “forming . . . fragments from a . . . network address associated with the router,” the segments are only employed for indexing a bit vector for fast packet filtering, as discussed above. The segments are not subsequently used for “marking a plurality of packets by adding the fragments to the plurality of packets” that are forwarded from the router.

Munger, paragraph [0065], describing use by a destination terminal 110 of a session key for decrypting received TARP packet payload data, does not relate to the subject matter recited in claim 36. Additionally, if the Examiner believes that destination terminal 110 (where the decryption of paragraph [0065] takes place) corresponds to the “router” recited in claim 36, it is noted that destination terminal 110 does not perform the recited “forwarding . . . of . . . packets from the router.”

For at least the above reasons, Munger fails to disclose the limitations recited in claim 36. Thus, Munger does not anticipate claim 36. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 36, and claims 37-41 which depend thereon.

II. Rejection Under 35 U.S.C. § 103(a)

In section 5 of the Office Action, claims 1-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Munger in view of U.S. Patent App. Pub. No. 2003/0145232 (Poletto). Applicants respectfully traverse.

A. Claims 1-17

First, independent claim 1 recites, *inter alia*,

configuring each respective one of the border devices to mark at least predetermined packets transmitted into the trusted region of the network . . .

Page 8, lines 7-8 of the Office Action asserts these limitations are disclosed by Munger, paragraph [0015], the Office Action stating that “special TARP headers IP.sub.T are then added to each payload.” However, the cited addition of TARP headers IP_T to TARP packets, described in more detail at Munger, paragraphs [0068]-[0075], is performed by originating terminal 100, and originating terminal 100 does not correspond to the recited “border device.” Instead, originating terminal 100, as its name suggests, is a point from which TARP packets originate. Accordingly, originating terminal 100 does not read upon the recited “border devices at entry points on an outer boundary of the trusted region of the network” that “mark . . . packets transmitted into the trusted region of the network.” If, for the sake of argument, Munger’s originating terminal 100 delineates “an outer boundary of the trusted region of the network,” and packets originate from originating terminal 100, Munger does not disclose or suggest the recited “packets transmitted into the trusted region of the network” being marked by originating terminal. As can be seen in Munger, FIG. 2, there are no “packets transmitted into” the TARP network that are being marked by originating terminal 100, as there are no packets that originate from outside of the TARP network that go into the TARP network. Instead, originating terminal

100 simply creates TARP packets that are transmitted within the TARP network in which it participates.

Accordingly, Munger does not disclose, suggest, or otherwise render obvious “border devices [configured] to mark . . . packets transmitted into the trusted region of the network.” Poletto does not bridge this gap between claim 1 and Munger.

Second, independent claim 1 recites, *inter alia*,

processing address fragments from the received marked packets to reconstruct the network address of the one border device.

Page 8, lines 13-16 of the Office Action asserts that Munger, paragraph [0068] teaches the above processing step. However, Munger does not disclose, suggest, or otherwise render obvious “reconstruct[ing] [a] network address,” as recited in claim 1. Instead, as noted at page 8, line 15 of the Office Action, Munger, paragraph [0068] merely discloses “reconstruction of messages” (*emphasis added*) – not a “network address,” as recited in claim 1. As shown in Munger, FIGS. 3A and 3B, the payloads of packets are interleaved by originating terminal 100 for transmission via the TARP network, and accordingly must be reconstructed by destination terminal 110. *See, e.g.*, Munger, paragraph [0114]. However, as far as network addresses are concerned, Munger simply discloses “the IP_T headers are converted into normal IP_C headers” (paragraph [0115]). This does not disclose or suggest “processing address fragments from the received marked packets to reconstruct the network address of the one border device,” as recited in claim 1. The Office Action appears to have incorrectly confused the reconstruction of packet payloads, as disclosed in Munger, with reconstructing the address of a third party border device from its address fragments.

For at least the above reasons, Munger does not disclose, suggest, or otherwise render obvious claim 1. Poletto, which is cited with respect to its use of gateway 26 for denial of

service attack characterization (*see* Office Action, page 9, line 1), does not bridge the above gaps between claim 1 and Munger. Thus, claim 1 is not obvious in view of the cited art.

Accordingly, Applicants respectfully request withdrawal of the rejection of independent claim 1, and claims 2-17 which depend thereon.

B. Claims 7-9

Claim 7 is nonobvious over the cited art for at least the same reasons discussed above with respect to independent claim 1, upon which claim 7 depends. Also, claim 7 recites further limitations which are also nonobvious over the cited art.

First, claim 7 recites, *inter alia*,

each respective one of the configured border devices performs . . .
fragmenting an address of the respective border device into a first plurality
of overlapping fragments of a first format.

Page 11, lines 12-14 of the Office Action asserts Munger, FIG. 16 and paragraph [0042], teaches the above limitations. However, as shown in FIG. 16 and described in paragraph [0211], Munger merely discloses “subdivid[ing] the 48 bits into four 12-bit fields,” which are non-overlapping. Thus, Munger does not disclose or suggest the recited “fragmenting an address . . . into . . . overlapping fragments.”

Further, as seen at page 8, lines 7-8 (claim 1), page 10, lines 4-6 (claim 3), and page 12, lines 1-3 (claim 7) of the Office Action, the Office Action asserts “marking of a packet by a respective border device,” as recited in claim 1, for example, is disclosed by where “Munger discloses special TARP headers IP.sub.T are then added to each payload.” This adding of TARP header IP_T, discussed in Munger, paragraph [0068], is performed by originating terminal 100. Accordingly, it appears the Office Action equates originating terminal 100 with the recited “border device.” However, Munger, FIG. 16, cited in the rejection of claim 7, relates to an

implementation of fast packet filtering performed by a *receiving* TARP node. *See* Munger, paragraphs [0201]-[0214]. Thus, the operation shown in FIG. 16 does not relate to the creation of TARP packets performed by Munger's originating terminal 100.

Second, claim 7 recites, *inter alia*, "assigning fragment identifiers of a first range to the first fragments." However, Munger, paragraphs [0208]-[0214], which relates to the presence vector algorithm employing subdivision as shown in FIG. 16, does not disclose or suggest the use of "fragment identifiers" for the four 12-bit fields. Additionally, there is no disclosure or suggestion that any such "fragment identifiers" for the four 12-bit fields are "add[ed] . . . to the plurality of packets forwarded by the respective border device," as recited in the last paragraph of claim 7. The synchronization of transmit and receive tables between pairs of TARP nodes shown in FIG. 9, and cited by page 11, lines 16-19 of the Office Action, has no bearing on the four 12-bit fields shown in FIG. 16, or fragment identifiers thereof.

Third, from the basis of rejection presented on page 12 of the Office Action for claim 8, it appears the Office Action asserts FIG. 16 also discloses "fragmenting the address of the respective border device into a second plurality of overlapping fragments of a second format" and "assigning fragment identifiers of a second range to the second fragments," as recited in claim 7. *See* Office Action, page 12, lines 14-15. For at least the same reasons discussed above, FIG. 16 does not disclose, suggest, or otherwise render obvious these steps of claim 7.

Fourth, claim 7 recites, *inter alia*,

each respective one of the configured border devices performs . . .
marking a plurality of packets forwarded therefrom into the trusted region
by adding the first and second fragments and corresponding assigned identifiers to
the plurality of packets forwarded by the respective border device.

However, as explained above, Munger does not disclose, suggest, or otherwise render obvious the recited use of first fragments or their corresponding identifiers, or second fragments

or their corresponding identifiers. Accordingly, Munger does not disclose or suggest the marking recited in claim 7.

For at least the above reasons, Munger does not disclose, suggest, or otherwise render obvious the limitations of claim 7. Poletto does not bridge these gaps between claim 7 and Munger. Thus, claim 7 is not obvious in view of the cited art. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 7, and claims 8 and 9 which depend thereon.

C. Claims 18-20

First, independent claim 18 recites, *inter alia*,

... marking communication packets forwarded by a router through a packet data communication network with router identifying information ...

fragmenting a network address of the router into a first plurality of overlapping address fragments of a first format;

...

adding the fragments ... to a plurality of packets forwarded by the router.

Page 17, lines 2-3 of the Office Action asserts Munger, paragraph [0015] discloses the above adding step, the Office Action stating “special TARP headers IP.sub.T are then added to each payload.” The cited addition of TARP headers IP_T to TARP packets, described in more detail at Munger, paragraphs [0068]-[0075], is performed by originating terminal 100. However, as its name suggests, originating terminal 100 is the origin of the disclosed TARP packets. Originating terminal 100 does not function as an intermediate router, and accordingly does not “[mark] communication packets forwarded by a router ... with router identifying information,” or do so by “fragmenting a network address of the router.” Nor is destination terminal 110 related to the recited “router.”

Second, independent claim 18 recites, *inter alia*,

fragmenting a network address of the router into a first plurality of overlapping address fragments of a first format;

...

adding the fragments and corresponding assigned identifiers to a plurality of packets forwarded by the router.

Much as discussed above with respect to the second paragraph of claim 7, page 16, lines 14-16 of the Office Action asserts Munger, FIG. 16 discloses the above fragmenting step. For much the same reasons presented with respect to claim 7, FIG. 16 does not render obvious the above fragmenting step of claim 18. For example, FIG. 16 and its corresponding discussion does not suggest “fragmenting a network address . . . into a first plurality of overlapping address fragments,” as recited in claim 18. Poletto does not bridge these gaps between claim 18 and Munger.

Third, independent claim 18 recites, *inter alia*,

fragmenting the address of the respective border device into a second plurality of overlapping fragments of a second format.

...

adding the fragments and corresponding assigned identifiers to a plurality of packets forwarded by the router.

Page 16, lines 19-20 and page 17, lines 6-7 of the Office Action asserts the above fragmenting is disclosed by Poletto, paragraph [0076]. Poletto, paragraphs [0075]-[0076] discloses “the gateway 26 looks at various traffic properties . . . to identify attacks and malicious flows. . . . Some examples . . . include: . . . Unusual amounts of IP fragmentation, or fragmented packets with bad or overlapping fragment offsets. This does not relate to the recited “fragmenting the address of the respective border device.” First, Poletto’s gateway 26 does not perform the fragmenting described in Poletto, paragraph [0076] – instead, gateway 26 detects fragmented packets. Such fragmented packets are characteristic of certain packets generated by

hostile systems. Second, paragraph [0076] relates to “fragmented IP packets” – not fragmenting an address as recited in claim 18. Although a network might naturally fragment a jumbo packet into a series of smaller packets in order to accommodate a small MTU, such fragmentation is rare. Poletto et al. recognized that various attacks might artificially fragment packets, and that this may serve as a mechanism for identifying hostile packets. However, such fragmentation, whether natural or artificial, does not correspond to the recited fragmenting of third party border device’s address. Third, IP packet fragmentation does not result in “overlapping fragments,” as recited in claim 18. Munger does not bridge these gaps between Poletto and claim 18.

Fourth, independent claim 18 recites, *inter alia*,

assigning fragment identifiers of a first range to the first fragments;
...
assigning fragment identifiers of a second range to the second fragments.

The Office Action does not address these limitations. Obviousness under Section 103 must demonstrate “the subject matter as a whole would have been obvious” (35 U.S.C. § 103(a)) (*emphasis added*). As the Office Action has not explained how the recited “assigning fragment identifiers” is rendered obvious by the cited art, the Office Action has not established *prima facie* obviousness of the claimed subject matter.

Fifth, independent claim 18 recites, *inter alia*,

adding the fragments and corresponding assigned identifiers to a plurality of packets forwarded by the router.

However, as explained above, the Office Action does not demonstrate the cited art renders obvious the recited “fragments and corresponding identifiers.” Additionally, it is noted that FIG. 16, which is relied upon by the Office Action with respect to the recited “first plurality of overlapping address fragments of a first format,” does not relate to the operation of originating

terminal 100, which performs the adding of TARP headers IP_T to packets cited at page 17, lines 2-3 of the Office Action, and as discussed in greater detail above.

For at least the above reasons, the cited art does not render obvious claim 18.

Accordingly, Applicants respectfully request withdrawal of the rejection of independent claim 18, and claims 19 and 20 which depend thereon.

D. Claims 21-30

First, independent claim 21 recites, *inter alia*,

... a marking device connected at a point ... at or near a source of a flow of packets ...
receiving data packets of the flow containing marks comprising fragments of a network address of the marking device.

Page 19, lines 5-9 of the Office Action asserts Munger's use of TARP headers IP_T discloses the above step of receiving. However, originating terminal 100, which creates TARP packets and adds the TARP header IP_T relied upon by the Office Action, does not provide the recited "marking device connected at a point ... at or near a source of a flow of packets," said marking device being separate from the "source of a flow of packets" to which it is connected. Instead, originating device 100 is the "source of a flow of packets." Munger does not disclose, suggest, or otherwise render obvious the recited "marking device." Poletto does not bridge this gap between claim 21 and Munger.

Second, independent claim 21 recites, *inter alia*, that

receiving data packets of the flow containing marks comprising fragments of a network address of the marking device ...
for each respective fragment from a newly received packet, comparing predetermined bits of the respective fragment to predetermined bits of one or more fragments from previously received packets, to determine if there is a match.

Page 19, lines 12-14 and page 20, lines 9-12 of the Office Action asserts the above limitations are disclosed by Poletto, paragraph [0111], which describes, with respect to filtering out hostile packets, that “[o]ne mechanism compares each parameter (field in a packet) to a list of suspicious values for that parameter, and drops packets for which matches occur.” However, this does not disclose or suggest comparing predetermined bits of a fragment “of a network address of the marking device,” as recited in claim 21. Munger does not bridge these gaps between claim 21 and Poletto.

Third, independent claim 21 recites, *inter alia*,

for each match between a respective fragment from a newly received packet and a fragment from a previously received packet, concatenating one of the matching fragments with non-matched bits of the other one of the matching fragments.

Page 19, lines 17-20 of the Office Action asserts the above concatenating step is disclosed by Munger, paragraph [0124], lines 1-4, which states that “[w]hen the router receives the client's packet, it compares the send and receive IP addresses of the packet with the next N predicted send and receive IP address pairs and rejects the packet if it is not a member of this set.” However, rejecting a non-matching packet, as discussed in Munger, paragraph [0124], does not relate to the recited “concatenating one of the matching fragments with non-matched bits of the other one of the matching fragments.” Additionally, much as described above with respect to the last 2 paragraphs of claims 34 and 35, Munger does not disclose or suggest concatenating bits of “fragments of a network address of the marking device,” as recited in claim 21. Poletto does not bridge these gaps between claim 21 and Munger.

Fourth, independent claim 21 recites, *inter alia*,

the matching and concatenation is performed one or more times until a combination of fragments produces a complete address of the device that marked a plurality of the received packets of the flow.

Page 20, lines 2-4 of the Office Action asserts the above limitations are disclosed by Munger, paragraph [0065], which discloses that at destination terminal 110, “[t]he session key is used to decrypt the payloads of the TARP packets 140 permitting an entire message to be reconstructed.” Much as described above with respect to the last 2 paragraphs of claims 34 and 35, use of the session key by destination terminal 110 does not disclose or suggest “matching and concatenation is performed one or more times until a combination of fragments produces a complete address.” Although Munger discloses deinterleaving of payload portions of received TARP packets, there is no disclosure of concatenating address fragments. For example, Munger does not disclose or suggest concatenation of address fragments occurring even once, let alone “one or more times until a combination of fragments produces a complete address.” Additionally, a session key is not required by the claimed subject matter, as the fragments include matching bits for matching and concatenation. Poletto does not bridge these gaps between claim 21 and Munger.

For at least the above reasons, the cited art does not render obvious independent claim 21. Thus, Applicants respectfully request withdrawal of the rejection of independent claim 21, and claims 22-30 which depend thereon.

E. Claims 31-33

Independent claim 31 recites, *inter alia*,

- a) fragmenting a network address of the border device into a first plurality of overlapping fragments of a first format;
- b) assigning fragment identifiers of a first range to the first fragments;
- c) fragmenting the network address of the border device into a second plurality of overlapping fragments of a second format;
- d) assigning fragment identifiers of a second range to the second fragments;

e) adding the fragments and corresponding assigned identifiers to at least the predetermined ones of the packets transmitted through packet data communication network.

For much the same reasons discussed above with respect to claims 7 and 18, at least the above limitations are not rendered obvious by the cited art. Page 26, lines 8-14 of the Office Action asserts Munger, paragraph [0023], lines 9-16 discloses the recited “fragmenting the network address of the border device into a second plurality of overlapping fragments.” However, whereas according to the claim “the network address of the border device” is fragmented, Munger, paragraph [0026] discloses that the same IP address may be allocated to different users. In other words, two separate originating terminals (different users), may reuse a single address. This does not disclose or suggest “fragmenting the network address of the border device,” as recited in claim 31. Poletto does not bridge the gaps between claim 31 and Munger.

Thus, the cited art does not render obvious independent claim 31. Accordingly, Applicants respectfully request withdrawal of the rejection of independent claim 31, and claims 32 and 33 which depend thereon.

III. Conclusion

In view of the above remarks, Applicants respectfully submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of this application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

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including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Eric M. Shelton", written over the printed name.

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